LPDES PERMIT NO. LA0100820, AI NO. 8838, ACTIVITY NO. PER20050002

LPDES STATEMENT OF BASIS AND RATIONALE
FOR THE DRAFT LOUISIANA POLLUTANT DISCHARGE ELIMINATION SYSTEM (LPDES) PERMIT TO DISCHARGE TO WATERS OF LOUISIANA

COMPANY/FACILITY:	Terrebonne Parish Consolidated Government Houma Generating Station Post Office Box 2768 Houma, Louisiana 70361-2768
ISSUING OFFICE:	Louisiana Department of Environmental Quality (LDEQ) Office of Environmental Services Post Office Box 4313 Baton Rouge, Louisiana 70821-4313
PREPARED BY:	Jeffrey C. Ratcliff Water and Waste Permits Division Phone #: 225-219-3093 Email: jeffrey.ratcliff@la.gov
DATE PREPARED:	March 31, 2006

1. PERMIT STATUS

A. Reason For Permit Action:
Reissuance of a Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term following regulations promulgated at LAC 33:IX.2711/40 CFR 122.46.

LAC 33:IX Citations: Unless otherwise stated, citations to LAC 33:IX refer to promulgated regulations listed at Louisiana Administrative Code, Title 33, Part IX.

40 CFR Citations: Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations in accordance with the dates specified at LAC 33:IX.2301.F, 4901, and 4903.

B. LPDES permit : LA0100820
NPDES permit effective date: February 1, 2001
NPDES permit expiration date: January 31, 2005

C. Date Application Received: August 18, 2005
Additional Information Received: March 6, 2006 (via email)

2. FACILITY INFORMATION

A. LOCATION – 1551 Barrow Street in Houma.
(Latitude: 29° 34' 51" Longitude: 90° 43' 20")

B. FACILITY TYPE/ACTIVITY – According to the application, Houma Generating Station is a steam electric generating facility with a net output of 91.5 megawatts electrical (MWe) and provides electricity to the City of Houma and to the grid.

Natural gas is burned in three boilers to produce high pressure, superheated steam. The steam is emitted into three steam turbines which drive electric generators. The facility also has a 300-KW diesel generator. The plant no longer operates the emergency peaking engines.

The Houma Generating Station is an existing electric generating facility that uses water from a municipal water supply. This facility is not regulated by Section 316(b) of the Clean Water Act for cooling water intake structures since it does not have an intake structure which withdraws water from waters of the state.

C. TECHNOLOGY BASIS - (40 CFR Chapter 1, Subchapter N/Parts 401 and 405-471 have been adopted by reference at LAC 33:IX.4903)

Guideline	Reference
Steam Electric Power Generating Point Source Category	40 CFR 423

Other sources of technology based limits:

1. LDEQ Stormwater Guidance, letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6)
2. LPDES General Permit for Hydrostatic Test Water Discharges (LAG670000), effective 2/1/03, modified on 3/1/03 and 9/1/05
3. Best Professional Judgement

D. FEE RATE

1. Fee Rating Facility Type: minor
2. Complexity Type: IV
3. Wastewater Type: III
4. SIC code: 4911

3. RECEIVING WATER

A. Stream: Houma Canal

B. Basin and Subsegment: Terrebonne, Segment 120304

C. Designated Uses - primary contact recreation
secondary contact recreation
fish and wildlife propagation
drinking water supply
agriculture

4. OUTFALL INFORMATION

Outfall 001

A. Discharge Type: The continuous discharge of cooling tower blowdown from cooling tower #14 and the diesel generator cooling tower, demineralizer regeneralization backwash, process area stormwater, and previously monitored hydrostatic test water from Internal Outfall 104.

B. Treatment: None

C. Location: At the point of discharge from the catch basin located in the southern portion of the property near Zev Avenue prior to mixing with other waters. (Lat 29° 34' 47", Lon 90° 43' 16")

D. Flow: 72,000 GPD

E. Discharge Route: Houma Canal

F. Basin and Segment: Terrebonne Basin, Segment 120304

Outfall 002

A. Discharge Type: The continuous discharge of cooling tower blowdown from cooling tower #15, potable water from the potable water tank when drained, process area stormwater, and previously monitored hydrostatic test water from Internal Outfall 104.

B. Treatment: None

C. Location: At the point of discharge from the adjacent to cooling tower # 15 and the potable water tank prior to mixing with other waters. (Lat 29° 34' 49", Lon 90° 43' 17")

D. Flow: 72,000 GPD

E. Discharge Route: Houma Canal

F. Basin and Segment: Terrebonne Basin, Segment 120304

Outfall 003

A. Discharge Type: The continuous discharge of cooling tower blowdown from cooling tower #16, boiler blowdown from boilers #14, #15, and #16, floor drain waste waters, process area stormwater, and previously monitored hydrostatic test water from Internal Outfall 104.

B. Treatment: None

C. Location: At the point of discharge from the drain located at the east side of the facility between cooling towers # 15 and # 16 prior to mixing with other waters. (Lat 29° 34' 49", Lon 90° 43' 15")

D. Flow: 78,000 GPD

E. Discharge Route: Houma Canal

F. Basin and Segment: Terrebonne Basin, Segment 120304

Internal Outfall 104

A. Discharge Type: The discharge of hydrostatic test water

B. Treatment: None

C. Location: At the point of discharge from the piping, vessel, tank, and/or equipment being tested throughout the facility prior to mixing with other waters. **This wastewater may be discharged through any of the following outfalls (Outfalls 001, 002 or 003).**

D. Flow: Variable

E. Discharge Route: Through Final Outfalls 001, 002, 003

5. PREVIOUS EFFLUENT LIMITATIONS

See Appendix A - previous permit limits.

6. SUMMARY OF PROPOSED PERMIT CHANGES

Outfall 001

1. The outfall description has changed to include the discharges of cooling tower blowdown from the diesel generator cooling tower, process area stormwater, and previously monitored hydrostatic test water.

2. A daily maximum TOC limitation of 50 mg/L has been added due to the addition of storm water being routed through Outfall 001.

3. The sampling point for Outfall 001 has been changed to the catch basin located in the southern portion of the property near Zev Avenue, as indicated in the application.

Outfall 002

1. The outfall description has changed to include the discharges of potable water from the potable water tank when drained, process area stormwater, and previously monitored hydrostatic test water.

2. Daily maximum limitations of 50 mg/L for TOC and 15 mg/L for Oil & Grease have been established due to addition of storm water being routed through Outfall 002.

3. The sampling point for Outfall 002 has been changed to the drain adjacent to cooling tower #15 and the potable water tank, as indicated in the application.

Outfall 003

1. The outfall description has changed to include the discharges of cooling tower blowdown from the diesel generator cooling tower, process area stormwater, and previously monitored hydrostatic test water.

2. A daily maximum TOC limitation of 50 mg/L has been added due to the addition of storm water being routed through Outfall 001.

3. The sampling point for Outfall 001 has been changed to the drain located at the east side of the facility between cooling towers #15 and #16, as indicated in the application.

Internal Outfall 104

1. Internal Outfall 104 has been established address the hydrostatic discharges that occur throughout the facility.

Part II Requirements

1. Benzene, BTEX, and Total Lead have been added to the 24 – Hour oral reporting section (Part II, Section E).

2. A prohibition for the discharges of metal cleaning wastewaters has been included in Part II of this draft LPDES permit with the definitions of metal cleaning waste and chemical metal cleaning waste since the application did not indicate that the facility discharges these waste streams.

3. An explanation of average concentration as it relates to chlorine discharges has been incorporated.

4. A Part II section (Part II, Section R) has been added to address storm water discharges covered under the LPDES Multi Sector General Permit.

7. PROPOSED PERMIT LIMITS

The specific effluent limitations and/or conditions will be found in the draft permit. Development of permit limits are detailed in the Permit Limit Rationale section below.

8. PERMIT LIMIT RATIONALE

The following section sets forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit. Also set forth are any calculations or other explanations of the derivation of specific effluent limitations and conditions, including a citation to the applicable effluent limitation guideline or performance standard provisions as required under LAC 33:IX.2707/40 CFR Part 122.44 and reasons why they are applicable or an explanation of how the alternate effluent limitations were developed.

A. TECHNOLOGY-BASED VERSUS WATER QUALITY STANDARDS-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Following regulations promulgated at LAC 33:IX.2707.L.2.b/40 CFR Part 122.44(l)(2)(ii), the draft permit limits are based on either technology-based effluent limits pursuant to LAC 33:IX.2707.A/40 CFR Part 122.44(a) or on State water quality standards and requirements pursuant to LAC 33:IX.2707.D/40 CFR Part 122.44(d), whichever are more stringent.

B. TECHNOLOGY-BASED EFFLUENT LIMITATIONS, MONITORING FREQUENCIES AND CONDITIONS

Regulations promulgated at LAC 33:IX.2707.A/40 CFR Part 122.44(a) require technology-based effluent limitations to be placed in LPDES permits based on effluent limitations guidelines where applicable, on BPJ (best professional judgement) in the absence of guidelines, or on a combination of the two. The permittee is subject to Best Practicable Control Technology Currently Available (BPT) and Best Available Technology Economically Achievable (BAT) effluent limitation guidelines listed below:

Manufacturing Operation	Guideline
Steam Electric Power Generating Point Source Category	40 CFR 423

C. WATER QUALITY-BASED EFFLUENT LIMITATIONS

Technology-based effluent limitations and/or specific analytical results from the permittee's application were screened against state water quality numerical standard based limits by following guidance procedures established in the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, September 27, 2001.

In accordance with LAC 33:IX.2707.D.1/40 CFR § 122.44(d)(1), the existing (or potential) discharge (s) was evaluated in accordance with the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, September 27, 2001, to determine whether pollutants would be discharged "at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any state water quality standard."

The following pollutants received water quality based effluent limits:

None

Minimum quantification levels (MQL's) for state water quality numerical standards-based effluent limitations are set at the values listed in the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, September 27, 2001. They are also listed in Part II of the permit.

D. MONITORING FREQUENCIES

Regulations require permits to establish monitoring requirements to yield data representative of the monitored activity [LAC 33:IX.2715/40 CFR 122.48(b)] and to assure compliance with permit limitations [LAC 33:IX.2707.I./40 CFR 122.44(I)]. Specific monitoring frequencies per outfall are listed in Section E.

E. OUTFALL SPECIFIC RATIONALES

Outfall 001

1. General Comments

According to the application, this outfall discharges cooling tower blowdown from cooling tower #14 and the diesel plant cooling tower, demineralizer regeneration backwash, process area stormwater, and previously monitored hydrostatic test water. If discharging demineralizer regeneration water, the water is treated by neutralization; however, this waste stream is currently being sent back to the cooling towers.

2. Effluent Limitations, Monitoring Frequencies, and Sample Types

EFFLUENT CHARACTERISTIC	LIMITATION Units (Specify)		MONTORING REQUIREMENTS	
	MONTHLY AVERAGE	DAILY MAXIMUM	MEASUREMENT FREQUENCY	SAMPLE TYPE
Flow (MGD)	Report	Report	1/day	Estimate
Temperature (°F)	Report	Report*	1/month	Grab
Total Suspended Solids	30 mg/L	100 mg/L	1/month	Grab
Oil & Grease	15 mg/L	20 mg/L	1/month	Grab
TOC	---	50 mg/L	1/quarter	Grab
Free Available Chlorine	0.2 mg/L	0.5 mg/L	1/month	Grab**
Total Chromium	0.2 mg/l	0.2 mg/L	1/year	Grab
Total Zinc	1.0 mg/L	1.0 mg/L	1/month	Grab
pH –Allowable Range (standard units)	6.0 Minimum	9.0 Maximum	1/month	Grab

* Instantaneous maximum.

** Sample shall be representative of any periodic episodes of chlorination, biocide usage, or other potentially toxic substance discharged on an intermittent basis.

Flow - The flow requirements for reporting the monthly average flow and daily maximum flow have been retained from the previous LPDES permit. This requirement is consistent with LAC 33:IX.2707.I.1.b/40 CFR 122.44(I)(1)(ii). The monitoring frequency is once per day when discharging by estimate.

Temperature - The current LPDES permit established monthly average and daily maximum reporting requirements. These reporting requirements are retained with the same monitoring frequency and sample type of once per month by grab, when discharging.

Total Suspended Solids - The current LPDES permit established a monthly average limitation of 30 mg/L and a daily maximum limit of 100 mg/L based on 40 CFR 423.12(b)(3) and (11). These limitations are retained with the same monitoring frequency of once per month by grab sample, when discharging.

Oil and Grease - The current LPDES permit established a monthly average limitation of 15 mg/L and a daily maximum limit of 20 mg/L based on 40 CFR 423.12(b)(3) and (11). These limitations are retained with the same monitoring frequency of once per month by grab sample, when discharging.

Total Organic Carbon - This draft permit establishes a daily maximum discharge limit of 50 mg/L for total organic carbon. Total organic carbon is established to limit any organic compounds that could be discharged via this outfall due to storm water. The limitation is based on Best Professional Judgement (BPJ) in accordance with this Office's guidance on stormwater, letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6). Monitoring frequency has been established at once per quarter by grab sample, when discharging.

Free Available Chlorine - The current LPDES permit established a monthly average limitation of 0.2 mg/L and a daily maximum limit of 0.5 mg/L based on 40 CFR 423.13(d)(1) and (g). These limitations are retained with the same monitoring frequency at once per month by grab sample, during times of chlorination, when discharging.

Total Chromium - The current LPDES permit established a monthly average limitation of 0.2 mg/L and a daily maximum limit of 0.2 mg/L based on 40 CFR 423.13(d)(1) and (g). These limitations are retained with the same monitoring frequency of once per year by grab sample, when discharging.

Total Zinc - The current LPDES permit established a monthly average limitation of 1 mg/L and a daily maximum limit of 1 mg/L based on 40 CFR 423.13(d)(1) and (g). These limitations are retained with the same monitoring frequency of once per month by grab sample, when discharging.

pH - The current LPDES permit established a minimum limit of 6.0 standard units and a maximum limit of 9.0 standard units for pH in accordance with 40 CFR 423.12(b)(1). These limitations are retained with the same monitoring frequency of once per month by grab sample, when discharging.

Outfall 002

1. General Comments

According to the application, this outfall discharges cooling tower blowdown from cooling tower #15, potable water from the potable water tank when drained, process area stormwater, and previously monitored hydrostatic test water.

2. Effluent Limitations, Monitoring Frequencies, and Sample Types

EFFLUENT CHARACTERISTIC	LIMITATION Units (Specify)		MONTORING REQUIREMENTS	
	MONTHLY AVERAGE	DAILY MAXIMUM	MEASUREMENT FREQUENCY	SAMPLE TYPE
Flow (MGD)	Report	Report	1/day	Estimate
Temperature (°F)	Report	Report*	1/month	Grab
Oil & Grease	---	15 mg/L	1/quarter	Grab
TOC	---	50 mg/L	1/quarter	Grab
Free Available Chlorine	0.2 mg/L	0.5 mg/L	1/month	Grab**
Total Chromium	0.2 mg/l	0.2 mg/L	1/year	Grab
Total Zinc	1.0 mg/L	1.0 mg/L	1/month	Grab
pH –Allowable Range (standard units)	6.0 Minimum	9.0 Maximum	1/month	Grab

* Instantaneous maximum.

** Sample shall be representative of any periodic episodes of chlorination, biocide usage, or other potentially toxic substance discharged on an intermittent basis.

Flow - The flow requirements for reporting the monthly average flow and daily maximum flow have been retained from the previous LPDES permit. This requirement is consistent with LAC 33:IX.2707.I.1.b/40 CFR 122.44(l)(1)(ii). The monitoring frequency is once per day when discharging by estimate.

Temperature - The current LPDES permit established monthly average and daily maximum reporting requirements. These reporting requirements are retained with the same monitoring frequency and sample type of once per month by grab, when discharging.

Oil and Grease - This draft permit establishes a daily maximum discharge limit of 15 mg/L for oil and grease. The limitation is based on Best Professional Judgement (BPJ) in accordance with this Office's guidance on stormwater, letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6). Monitoring frequency has been established at once per quarter by grab sample, when discharging.

Total Organic Carbon - This draft permit establishes a daily maximum discharge limit of 50 mg/L for total organic carbon. Total organic carbon is established to limit any organic compounds that could be discharged via this outfall due to storm water. The limitation is based on Best Professional Judgement (BPJ) in accordance with this Office's guidance on stormwater, letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6). Monitoring frequency has been established at once per quarter by grab sample, when discharging.

Free Available Chlorine - The current LPDES permit established a monthly average limitation of 0.2 mg/L and a daily maximum limit of 0.5 mg/L based on 40 CFR 423.13(d)(1) and (g). These limitations are retained with the same monitoring frequency at once per month by grab sample, during times of chlorination, when discharging.

Total Chromium - The current LPDES permit established a monthly average limitation of 0.2 mg/L and a daily maximum limit of 0.2 mg/L based on 40 CFR 423.13(d)(1) and (g). These limitations are retained with the same monitoring frequency of once per year by grab sample, when discharging.

Total Zinc - The current LPDES permit established a monthly average limitation of 1 mg/L and a daily maximum limit of 1 mg/L based on 40 CFR 423.13(d)(1) and (g). These limitations are retained with the same monitoring frequency of once per month by grab sample, when discharging.

pH - The current LPDES permit established a minimum limit of 6.0 standard units and a maximum limit of 9.0 standard units for pH in accordance with 40 CFR 423.12(b)(1). These limitations are retained with the same monitoring frequency of once per month by grab sample, when discharging.

Outfall 003

1. General Comments

According to the application, this outfall discharges cooling tower blowdown from cooling tower #16, boiler blowdown from boilers # 14, #15, and #16, floor drain waste waters, process area stormwater, and previously monitored hydrostatic test water.

2. Effluent Limitations, Monitoring Frequencies, and Sample Types

EFFLUENT CHARACTERISTIC	LIMITATION Units (Specify)		MONTORING REQUIREMENTS	
	MONTHLY AVERAGE	DAILY MAXIMUM	MEASUREMENT FREQUENCY	SAMPLE TYPE
Flow (MGD)	Report	Report	1/day	Estimate
Temperature (°F)	Report	Report*	1/month	Grab
Total Suspended Solids	30 mg/L	100 mg/L	1/month	Grab
Oil & Grease	15 mg/L	20 mg/L	1/month	Grab
TOC	---	50 mg/L	1/quarter	Grab
Free Available Chlorine	0.2 mg/L	0.5 mg/L	1/month	Grab**
Total Chromium	0.2 mg/l	0.2 mg/L	1/year	Grab
Total Zinc	1.0 mg/L	1.0 mg/L	1/month	Grab
pH –Allowable Range (standard units)	6.0 Minimum	9.0 Maximum	1/month	Grab

* Instantaneous maximum.
** Sample shall be representative of any periodic episodes of chlorination, biocide usage, or other potentially toxic substance discharged on an intermittent basis.

Flow - The flow requirements for reporting the monthly average flow and daily maximum flow have been retained from the previous LPDES permit. This requirement is consistent with LAC 33:IX.2707.1.1.b/40 CFR 122.44(I)(1)(ii). The monitoring frequency is once per day when discharging by estimate.

Temperature - The current LPDES permit established monthly average and daily maximum reporting requirements. These reporting requirements are retained with the same monitoring frequency and sample type of once per month by grab, when discharging.

Total Suspended Solids - The current LPDES permit established a monthly average limitation of 30 mg/L and a daily maximum limit of 100 mg/L based on 40 CFR 423.12(b)(3) and (11). These limitations are retained with the same monitoring frequency of once per month by grab sample, when discharging.

Oil and Grease - The current LPDES permit established a monthly average limitation of 15 mg/L and a daily maximum limit of 20 mg/L based on 40 CFR 423.12(b)(3) and (11). These limitations are retained with the same monitoring frequency of once per month by grab sample, when discharging.

Total Organic Carbon - This draft permit establishes a daily maximum discharge limit of 50 mg/L for total organic carbon. Total organic carbon is established to limit any organic compounds that could be discharged via this outfall due to storm water. The limitation is based on Best Professional Judgement (BPJ) in accordance with this Office's guidance on stormwater, letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6). Monitoring frequency has been established at once per quarter by grab sample, when discharging.

Free Available Chlorine - The current LPDES permit established a monthly average limitation of 0.2 mg/L and a daily maximum limit of 0.5 mg/L based on 40 CFR 423.13(d)(1) and (g). These limitations are retained with the same monitoring frequency at once per month by grab sample, during times of chlorination, when discharging.

Total Chromium - The current LPDES permit established a monthly average limitation of 0.2 mg/L and a daily maximum limit of 0.2 mg/L based on 40 CFR 423.13(d)(1) and (g). These limitations are retained with the same monitoring frequency of once per year by grab sample, when discharging.

Total Zinc - The current LPDES permit established a monthly average limitation of 1 mg/L and a daily maximum limit of 1 mg/L based on 40 CFR 423.13(d)(1) and (g). These limitations are retained with the same monitoring frequency of once per month by grab sample, when discharging.

pH - The current LPDES permit established a minimum limit of 6.0 standard units and a maximum limit of 9.0 standard units for pH in accordance with 40 CFR 423.12(b)(1). These limitations are retained with the same monitoring frequency of once per month by grab sample, when discharging.

Outfall 104

1. General Comments

   According to the additional information submitted via email dated March 6, 2006, this outfall discharges hydrostatic test water throughout the facility on certain occasions. This wastewater may be discharged through Outfall 001, 002, and 003.

2. Effluent Limitations, Monitoring Frequencies, and Sample Types

EFFLUENT CHARACTERISTIC	LIMITATION Units (Specify)		MONTORING REQUIREMENTS	
	MONTHLY AVERAGE	DAILY MAXIMUM	MEASUREMENT FREQUENCY	SAMPLE TYPE
Flow (MGD)	---	Report	1/prior to discharge event	Estimate
TSS	---	90 mg/L	1/prior to discharge event	Grab
Oil & Grease	---	15 mg/L	1/prior to discharge event	Grab
TOC*	---	50 mg/L	1/prior to discharge event	Grab
Benzene**	---	50 µg/L	1/prior to discharge event	Grab
Total BTEX**	---	250 µg/L	1/prior to discharge event	Grab
Lead**	---	50 µg/L	1/prior to discharge event	Grab

* Total Organic Carbon (TOC) shall be measured on discharges from pipelines, flowlines, piping, vessels, or tanks which have previously been in service – i.e., those which are not new.

** Benzene, Total BTEX, and Total Lead shall be measured on discharges from pipelines, flowlines, piping, vessels, or tanks which have been used for the storage or transportation of liquid or gaseous petroleum hydrocarbons.

Flow, Total Suspended Solids, Oil & Grease, Total Organic Carbon, Benzene, Total BTEX, Lead, and pH - The effluent limitations and monitoring frequencies for flow, TSS, oil & grease, TOC, Benzene, Total BTEX, and Lead are based on LPDES General Permit for Hydrostatic Test Water Discharges (LAG670000), effective February 1, 2003, modified on March1, 2003 and September 1, 2005.

Additives such as corrosive inhibitors, bactericides, and dyes may not be added to test water to be discharged without prior written approval from this Office. Written requests for approval must include toxicity data for each additive proposed for use, as well as a clear description of the proposed discharge including projected volumes of wastewaters and additive levels in the wastewaters.

Part II Specific Conditions

PROHIBITION OF PCB DISCHARGES

As commanded by 40 CFR 423.15(b), a Part II condition is proposed in this draft permit prohibiting the discharge of polychlorinated biphenyl compounds.

"There shall be no discharge of polychlorinated biphenyls (PCB's). The minimum quantification level for PCB's is 1.0 µg/l. If any individual analytical test result for PCB's is less than the minimum quantification level, then a value of zero (0) shall be used for the Discharge Monitoring Report (DMR) calculations and reporting requirements."

FREE AVAILABLE CHLORINE

The term "free available chlorine" shall mean the value obtained using the amperometric titration method for free available chlorine described in the latest edition of Standard Methods for the Examination of Water and Wastewater.

Free available chlorine may not be discharged from any unit for more than two hours in any one day and not more than one unit in any plant may discharge free available chlorine at any one time.

TEMPERATURE

Daily temperature discharge is defined as the flow-weighted average (FWAT) and, on a daily basis, shall be monitored and recorded in accordance with Part I of this permit. FWAT shall be calculated at equal time intervals not greater than two hours. The method of calculating FWAT is as follows:

$$\text{FWAT} = \frac{\text{SUMMATION (INSTANTANEOUS FLOW X INSTANTANEOUS TEMPERATURE)}}{\text{SUMMATION (INSTANTANEOUS FLOW)}}$$

"Daily average temperature" (also known as average monthly or maximum 30 day value) shall be the arithmetic average of all FWATs calculated during the calendar month.

PROHIBITION OF METAL CLEANING WASTEWATERS

The permittee is prohibited from discharging metal cleaning wastewater or chemical metal cleaning wastewater to the waters of the state. If generated, these wastewaters must be transported offsite for proper disposal.

PERMIT REOPENER CLAUSE

In accordance with LAC 33:IX.2903, this permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(c) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act, if the effluent standard or limitations so issued or approved:

1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or

2. Controls any pollutant not limited in the permit; or

3. Require reassessment due to change in 303(d) status of waterbody; or

4. Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP) REQUIREMENT

Stormwater discharges are covered under the Multi-Sector General Permit, LAR05M786, issued on July 16, 2001.

Should coverage under the Multi-Sector General Permit be canceled at any time, the permittee shall submit a request in writing to modify the permit to include additional stormwater outfalls and any additional stormwater requirements current at the time.

9. COMPLIANCE HISTORY/COMMENTS

A review of LDEQ records from the time period of January 2004, through December 2005 was conducted and no records of enforcement actions were found during this time frame.

B. The most recent inspection was conducted on January 22, 2004. No issues of concern were noted.

C. A DMR review of all of the monitoring reports for the period of January 2004 through December 2005 revealed that there were no effluent violations. However, there were several DMR deficiencies noted during the course of the review. The DMR deficiencies included:

1. The May 2004 DMR for Outfall 002 indicated a flow, but there were no analytical data for the other parameters nor did the DMR indicate that there was "no discharge".

2. There was not a December 2004 DMR for Outfall 003 in the file reviewed.

3. There were no DMRs in the file reviewed for the 4th quarter of 2005.

10. WATER QUALITY CONSIDERATIONS

The discharges from this facility consist of cooling tower blowdown, low volume waste waters (demineralizer regeneration backwash, boiler blowdown, and floor drain waste waters) process area stormwater, and hydrostatic test water to the Houma Canal of the Terrebonne Basin, Segment No. 120104. Louisiana's Final 2004 Section 303(d) List of Impaired Waterbodies Requiring a TMDL (2004 List) revealed that the Terrebonne Basin, Segment No. 120104 is listed on the 303(d) list as being impaired for nutrients and organic enrichment/low DO. To date, no Total Maximum Daily Loading (TMDL) assessments have been completed for this waterbody. TMDLs for organic enrichment/low DO, and nutrients are scheduled to be completed in 2007-2008.

The discharges from Outfalls 001, 002, 003, and 104 are not suspected to cause or contribute to the organic enrichment/low DO and nutrient impairments of the Houma Canal. However, to protect against instances where the water may come into contact with organic enrichment/low DO and nutrient substances, effluent limitations for TOC have been established in the permit.

11. ENDANGERED SPECIES

The receiving waterbody, Subsegment 120304 of the Terrebonne Basin, is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 21, 2005, from Watson (FWS) to Gautreaux (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

12. HISTORIC SITES

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

13. TENTATIVE DETERMINATION

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for discharges described in the application.

14. PUBLIC NOTICES

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the proposed issuance of LPDES individual permits and may request a public hearing to clarify issues involved. This Office's address is on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

A local newspaper of general circulation and
The Office of Environmental Services Public Notice Mailing List.

APPENDIX A

PREVIOUS EFFLUENT LIMITATIONS

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning the effective date and lasting through the expiration date the permittee is authorized to discharge from:

Outfall 001, the continuous discharge of cooling tower blowdown from unit #14 and neutralized demineralization backwash (estimated flow is 0.018 MGD).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations (lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)		Monitoring Requirements	
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow-MGD	50050	Report	Report	---	---	1/day	Estimate
Temperature (°F)	00011	Report(*1)	Report(*1)	---	---	1/month	Grab(*2)
Total Suspended Solids	00530	---	---	30	100	1/month	Grab
Oil & Grease	03582	---	---	15	20	1/month	Grab
Free Available Chlorine	50064	---	---	0.2	0.5	1/month	Grab(*3)
Total Chromium	01034	---	---	0.2	0.2	1/year	Grab
Total Zinc	01092	---	---	1.0	1.0	1/month	Grab
pH Min/Max Values (Standard Units)	00400	---	---	6.0(*4) (Min)	9.0(*4) (Max)	1/month	Grab

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall 001, at the point of discharge from the catch basin where the demineralization meets with the cooling tower blowdown from unit #14 prior to combining with any other waters.

FOOTNOTE(S):

(*1) See Part II.N.

(*2) Analyze immediately.

(*3) Sample shall be taken during usage of any biofouling agents or during periods of chlorination.

(*4) The permittee shall report on the Discharge Monitoring Reports both the minimum and maximum instantaneous ph values measured.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

During the period beginning the effective date and lasting through the expiration date the permittee is authorized to discharge from:

Outfall 002, the continuous discharge of cooling tower blowdown from unit #15. (estimated flow is 0.036 MGD).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow-MGD	50050	Report	Report	---	---	1/day	Estimate
Temperature (°F)	00011	Report(*1)	Report(*1)	---	---	1/month	Grab (*2)
Free Available Chlorine	50064	---	---	0.2	0.5	1/month	Grab (*3)
Total Chromium	01034	---	---	0.2	0.2	1/year	Grab
Total Zinc	01092	---	---	1.0	1.0	1/month	Grab
pH Min/Max Values (Standard Units)	00400	---	---	6.0 (*4) (Min)	9.0 (*4) (Max)	1/month	Grab

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall 002, at the point of discharge from the cooling tower blowdown line of unit #15 prior to combining with any other waters.

FOOTNOTE(S):

(*1) See Part II.N.

(*2) Analyze immediately.

(*3) Sample shall be taken during usage of any biofouling agents or during periods of chlorination.

(*4) The permittee shall report on the Discharge Monitoring Reports both the minimum and maximum instantaneous ph values measured.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

During the period beginning the effective date and lasting through the expiration date the permittee is authorized to discharge from:

Outfall 003, the continuous discharge of cooling tower blowdown from unit #16, boiler blowdown and floor drains (estimated flow is 0.042 MGD).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations (lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)		Monitoring Requirements	
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type
Flow-MGD	50050	Report	Report	---	---	1/day	Estimate
Temperature (°F)	00011	Report (*1)	Report (*1)	---	---	1/month	Grab (*2)
Total Suspended Solids	00530	---	---	30	100	1/month	Grab
Oil & Grease	03582	---	---	15	20	1/month	Grab
Free Available Chlorine	50064	---	---	0.2	0.5	1/month	Grab (*3)
Total Chromium	01034	---	---	0.2	0.2	1/year	Grab
Total Zinc	01092	---	---	1.0	1.0	1/month	Grab
pH Min/Max Values (Standard Units)	00400	---	---	6.0 (*4) (Min)	9.0 (*4) (Max)	1/month	Grab

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Outfall 003, at the point of discharge from the catch basin southwest of cooling tower # 16 prior to combining with any other waters.

FOOTNOTE(S):

(*1) See Part II.N.

(*2) Analyze immediately.

(*3) Sample shall be taken during usage of any biofouling agents or during periods of chlorination.

(*4) The permittee shall report on the Discharge Monitoring Reports both the minimum and maximum instantaneous ph values measured.